

I Claim:

1. A tool for the removal and replacement of valve springs from valve stems on a cylinder head of an internal combustion engine while the cylinder head is either mounted to an engine block within the vehicle or is positioned on a work bench apart from the engine block, the
5 tool comprising:

a bracket assembly mountable to the cylinder head to be worked on, the bracket assembly comprising a plurality of threaded upright bolts extending away from the cylinder head and each of the threaded bolts associated with an adjacent upright guide;

a plurality of pressure plates positioned on each of the upright bolts and upright guides
10 and each movably secured on an upright bolt with a threaded nut; and

a plurality of valve guides positioned so as to engage an outer upper perimeter of a valve spring on the cylinder head and simultaneously engage the pressure plates positioned on the upright bolts;

wherein rotation of each threaded nut on the upright bolts directs the pressure plates
15 against the valve guides, which in turn are directed against the valve springs on the cylinder head in a manner that compresses the springs and permits the removal of the valve springs from the valve stems.

2. The tool of Claim 1 wherein the bracket assembly is mounted to the cylinder head
20 with a plurality of threaded head bolts.

3. The tool of Claim 2 wherein said threaded head bolts are positioned to be aligned with existing threaded apertures on the cylinder head.

4. The tool of Claim 1 wherein each of said plurality of pressure plates is associated with two of the valve guides and operates to compress two adjacent valve springs on the cylinder head.

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5. A tool for the removal and replacement of valve springs from valve stems on a cylinder head of an internal combustion engine while the cylinder head is either mounted to an engine block within the vehicle or is positioned on a work bench apart from the engine block, the tool comprising:

10 a bracket assembly mountable to the cylinder head to be worked on with a plurality of threaded head bolts positioned to be aligned with existing threaded apertures on the cylinder head, the bracket assembly comprising a plurality of threaded upright bolts extending away from the cylinder head and each of the threaded bolts associated with an adjacent upright guide;

a plurality of pressure plates positioned on each of the upright bolts and upright guides
15 and each movably secured on an upright bolt with a threaded nut; and

a plurality of valve guide pairs positioned so as to engage an outer upper perimeter of a pair of adjacent valve springs on the cylinder head and simultaneously engage the pressure plates positioned on the upright bolts;

wherein rotation of each threaded nut on the upright bolts directs the pressure plates
20 against the pair of valve guides, which in turn are directed against the pair of valve springs on the cylinder head in a manner that compresses the springs and permits the removal of the valve springs from the valve stems.